

3. The spot welding system according to claim 2, wherein the workpiece detection parameter is included in the welding instruction at each welding point.

4. The spot welding system according to claim 2, wherein the operation program includes the welding instruction at each welding point and setting information for setting the workpiece detection parameter at each welding point, the welding instruction includes a sign or a number relating to the workpiece detection parameter, and the workpiece detection parameter corresponding to the sign or the number is set in the setting information.

5. The spot welding system according to claim 1, wherein the workpiece detection parameter includes a movement speed of the movable electrode when the movable electrode moves close to a surface of the workpiece.

6. The spot welding system according to claim 5, wherein the control device includes:

a calculation part which calculates the movement speed of the movable electrode based on the state value of the electrode drive motor when the movable electrode abuts on the surface of the workpiece; and

an update part which updates the movement speed of the movable electrode set in the operation program based on the movement speed of the movable electrode calculated by the calculation part.

7. The spot welding system according to claim 1, wherein the workpiece detection parameter includes an abutment judgement value for judging whether or not the movable electrode abuts on a surface of the workpiece.

8. The spot welding system according to claim wherein the control device includes:

a calculation part which calculates the abutment judgement value based on the state value of the electrode drive motor when the movable electrode abuts on the surface of the workpiece; and

an update part which updates the abutment judgement value set in the operation program based on the abutment judgement value calculated by the calculation part.

9. A spot welding system comprising:

a spot welding gun including a pair of electrodes disposed so as to be opposed to each other;

a robot which changes a relative position of the spot welding gun and a workpiece so that the workpiece is disposed between the pair of electrodes; and

a control device which controls the spot welding gun and the robot, wherein

the robot includes a robot drive motor which drives arms and a wrist portion and a robot position detector for detecting a position and a posture of the robot,

the control device includes a storage part which stores an operation program and is formed so as to be capable of detecting a state value of the robot drive motor including an electric current, a torque, or a number of rotations of the robot drive motor, and further, drives the robot and is formed so as to perform a position detection control which detects a position of the workpiece based on the position and the posture of the robot when the state value of the robot drive motor deviates from a predetermined range,

a plurality of welding points are set in the operation program and the operation program includes a workpiece detection parameter for performing the position detection control,

the workpiece detection parameter is set at each welding point, and

the control device performs the position detection control based on the workpiece detection parameter obtained from the operation program with respect to each welding point.

* * * * *